Screen Dumps in view of the Aritomi patent (US6,619,632) is respectfully traversed.

Neither reference considers or even suggests the problem to which the present invention is directed. Accordingly, neither of the references suggests Applicants' novel claimed solution to the problem. There is no suggestion in any reference of any problem or need which would lead one skilled in the art to try to combine the teachings of the references for any purpose. Thus, any suggestion that the two references may be combined as proposed by the Examiner does not come from either reference, but can only be made in the light of Applicants' own teaching. This has been established to be an improper basis for a combination of references under 35 U.S.C. 103.

The present invention addresses the problems of the visually or otherwise physically impaired in interfacing with computer displays. The user still commands the computer primarily through manual pointing devices such as mice, joy sticks and trackballs that control the on-screen cursor movements. It must be noted that the principles involved in such pointing devices were developed over a generation ago when most of the people involved in interfaces to computers were computer professionals who were willing to invest great amounts of time in developing computer skills. Cursor control devices, such as the mouse, translate relatively precise orthogonal manual movements into precise cursor movements on the display screen. Users with poor hand-eye coordination due to poor eyesight, physical impairment, feebleness or other dexterity problems find the computer mouse to be quite stressful and frustrating. In this connection, the drop down menu has become a primary means of interactive user selection of items or objects in interactive displays. While cursoring

through drop down menus and making selections therefrom can eventually be mastered by persons without physical or visual impairments, the drop down and like menus, such as pop-up menus, are very frustrating and frequently impossible to use by the physically or visually impaired. Controlling a cursor to scroll up or down a list of items running vertically in narrow item bands is extremely difficult for the impaired. Similarly, moving the cursor to a small scroll button at a menu and then holding the button down in a steady position while the menu scrolls itself down may be equally frustrating for physically impaired users.

The present invention offers a solution to these problems with scrolled menus by providing alternate access for physically impaired users to items normally displayed in drop down menus. If the user feels unable to use or frustrated in using such scrolling menu techniques, he has the option to choose to display as an alternative to this set of sequential menus a hierarchical tree arrangement of selectable items corresponding to items in said set of menus in which the items or icons have a greater spatiality than the spatiality of the customary arrangement of items in standard drop-down menus. This greater spatiality may be achieved, for example through larger items or larger spacing between items.

The combination of references fails to suggest such a system for aiding physically impaired. All the Microsoft Windows screen dumps show is that drop down menus are known. Applicants have admitted this.

However, the Aritomi patent, even as modified by the drop-down menu, still does not suggest the present invention. Aritomi provides an expedient for permitting a user of a sequence of related menus to avoid sequentially plodding through all of the menus to reach his target item.

The user is enabled to bring up and display the entire hierarchy of items represented by his sequence of menus so that may hone in on his target item in a single display screen.

Thus, the goals of Aritomi are not suggestive of the present invention. In fact, Aritomi would likely lead one skilled in the art away from the present invention because the alternative hierarchical screen of Aritomi is much more complex than its original simple menu screen.

There is nothing in Aritomi suggestive of greater spatiality between its items in the hierarchical screen. Examiner suggests that Fig. 5 of Aritomi teaches greater spatiality for the hierarchical alternative. However, the disclosure of Aritomi describes hierarchical array of items 505 as an alternative to main menu 500. How can anyone hold that in the arrangement of Fig. 5, the items in the hierarchy 505 have a greater spatiality between items than the pair of items 501 in the main menu 500. It is quite obvious that an impaired person would a much greater problem in selecting an item from the hierarchy 505 where the items are more closely spaced and overlapping than he would from the spaced pair of items 501 in main menu 500.

The rejection of claims 4, 5, 12, 13, and 20, 21 under 35 USC 103(a) over the combination of the Microsoft Explorer Screen Dumps in view of the Aritomi patent (US6,619,632), further in view of Lamping et al (US5,619,632) is respectfully traversed. These dependent claims are submitted to be patentable for the reasons set forth above for their independent claims. In addition these claims set forth that the icons in the hierarchy are varied in size or in distance from each other so that they may be effectively accessed.